

## **ABSTRACT OF THE DISCLOSURE**

This identity authentication system is used in commercial transactions at a point-of-sale terminal. The system comprises a device for capturing a customer signature (signature pad or a smart pen), a sensor for capturing a biometric property of the customer during the transaction, a local processor, a wireless device carried by the customer, a device reader positioned at the point-of-sale terminal, and a host computer. The customer registers advising the system of a customer account that is to be used for payment. The customer also submits an electronic signature (written script of name) and a digital signature for reference purposes – a fingerprint. The customer is then issued a wireless device, the wireless device having memory. The memory may be an ID card, a credit card, a smart card, a transponder, a barcode, or a combination of these memories. A identifying device reader (such as a card reader, an interrogator, a scanner) is located at the point-of-sale terminal that is compatible with the wireless device. Thereafter, when the customer uses a stylus to submit written data - an electronic signature is generated. Similarly, a sensor in the stylus captures data that is used to generate a digital signature. A reference print is then accessed through the memory in the wireless device carried by the customer. The digital and electronic signatures are then compared against the reference data to authentic identity.